

abstract

GEOMETRIC PDE SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

In optimal transport theory, one wants to understand the phenomena arising when mass is transported in a cheapest way. This variational problem is governed by the structure of the transportation cost function defined on the product of the source and target domains. For regularity of optimal transportation maps, a crucial condition for the cost was found recently by Ma, Trudinger and Wang, which later was confirmed to be necessary by Loeper. We present a work in progress joint with Alessio Figalli and Robert McCann, which shows the Hoelder continuity of optimal maps under a degenerate Ma-Trudinger-Wang condition. This result generalizes the result of Caffarelli given for the case of Euclidean distance squared cost.